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SUMMARY

A METHOD OF INCREASING THE LIFE OF CYLINDER HEADS

Engineer Charkov

Cylinder heads are one of the most vulnerable parts of combustion engines. The lower portion seems to suffer most due to overloading and heat generation. Attempts have been made to improve the dependability of cylinder heads, but, up to the present, with little success. Bessemer steel and welding have been used in the construction of cylinder heads, but cast iron is still the basic material.

The greatest defect of cylinder heads is the formation of cracks in the crosspieces between the valves. A temporary measure to alleviate this condition is to strengthen the head in the most vulnerable spot. On the base of the head between the openings of the valves, inserts, widened at the ends and made of high-grade steel, are placed perpendicular to a line passing the centers of the slots. The inserts are prepared individually; then they are heated to a temperature of 900 degrees C and are stamped while hot. The inserts are secured to grooves in the crosspieces. They are cooled and shrunk and immediately strengthen that part of the head in which cracks may form.

The above-described method of strengthening cylinder heads is used by Chirkov at one of the transfer stations of the Astrakhan-Garaton pipe line.

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CLASSIFICATION

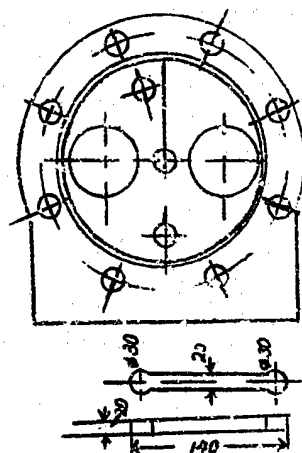
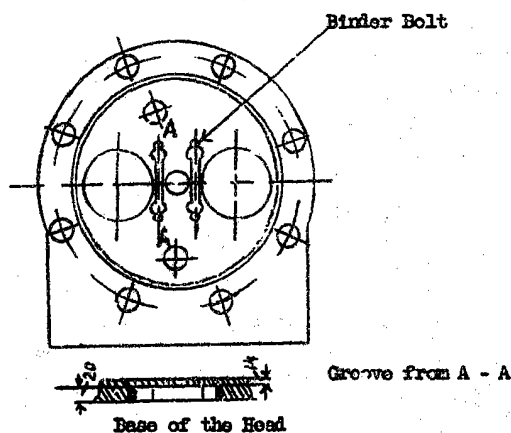
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